CALIFORNIA ACADEMY OF SCIENCES

Annual Report

Fiscal Year 2020

BYERS LOBBY
African Hall
Penguins
Welcome to the California Academy of Sciences.
Exhibits and Programs Now Showing
Venom
You Are Here
Welcome,
Members!

In early 2020, as the COVID-19 pandemic upended the world, the Academy was no exception. When we closed our museum to the public in mid-March, our biggest concern was how to continue providing access to the wonders of science and nature when children, families, and educators needed it most.

We quickly launched Academy @ Home, an online suite of immersive educational resources and livestream events like *Breakfast Club* and *Virtual NightLife*, to keep our communities inspired and connected. Academy scientists didn't miss a beat—turning their attention to vital research; sharing science-based information with the public about the ongoing pandemic; and strengthening partnerships locally and globally to ensure that the pace of scientific discovery continued.

The pandemic lent a sense of urgency to a major endeavor: developing a bold, new institutional strategy that will guide the Academy into the decades ahead. We are laser-focused on conducting science that addresses the dual threats of climate change and biodiversity loss; energizing community-based partnerships and conservation actions; and expanding access to high-quality science and nature education, with a focus on diversifying the field of science.

As we advocate for a thriving future for humans and (non-human) nature, events of the past year have spurred us to participate in the critical work of dismantling systems of white supremacy and oppression. The Academy is committed to addressing racism, diversity, equity, and inclusion within our institution and beyond. We created an internal task force and will work with a Bay Area-based consultancy with deep expertise in anti-racist work, that represents the perspectives of marginalized groups. We must be more responsive to the many communities we serve; build authentic relationships that engage us with the struggles and successes of communities burdened by systemic racism and injustice; and fight for access to healthy air, water, food, and nature for all people.

Despite projected declines in revenue over the next fiscal year due to a long closure, we are confident in our financial sustainability. This trust is widely shared, reflected by generous philanthropic support from our Board of Trustees, the Hearst Foundations, and the many individuals, foundations, and corporate supporters who have kept us afloat in uncertain times. Thank you. We are here for you, today and always.

Elizabeth R. Patterson

Elizabeth R. Patterson
Chair of the Board of Trustees

Scott Sampson

Scott Sampson, PhD
Executive Director
William R. and Gretchen B. Kimball Chair

Biodiversity science for solutions

Academy scientists in our **Institute for Biodiversity Science and Sustainability** continued their world-changing work—with many contributing to **solutions** to the COVID-19 crisis. Chief of Science and virologist **Dr. Shannon Bennett** was a trusted voice and shared science-based information about the pandemic with the public. Her research—based on genetic data and using computational tools—leverages our world-class **Center for Comparative Genomics** to unravel the origins and evolution of the novel coronavirus.

The Academy's new Assistant Curator of Herpetology and Patterson Scholar, **Dr. Rayna Bell**, used her research on amphibian diversity in the Guinean Forest Biodiversity Hotspot to teach school children and communities about COVID-19, especially in isolated and underserved areas. Dr. Bell worked remotely with local partners to distribute thousands of coloring pages showing steps to prevent the spread of coronavirus, featuring endemic island animals from a biodiversity education curriculum—along with pencils and locally-produced masks.

In Madagascar, we prepared to break ground on a new facility to scale ***Breakfast Before Conservation***, a project that bolsters food and economic security for women and children through sustainable insect farming. It also protects endangered lemurs from bushmeat hunting and preserves their forest habitat, reducing the transmission risks of zoonotic diseases like COVID-19 from animal to human populations.

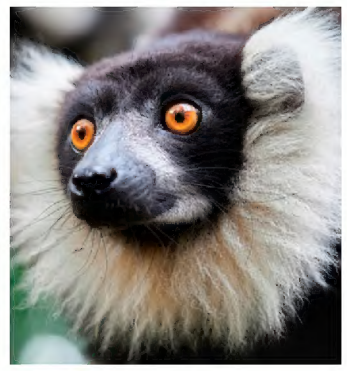
Our intrepid global ***Hope for Reefs*** team continued critical work on coral reef biodiversity research, conservation, and restoration. In partnership with colleagues in Curaçao and Australia, we are developing novel tools and technologies to map and monitor reefs to help protect these threatened ecosystems that sustain 25 percent of all marine life.

At the museum, **Steinhart Aquarium** biologists cared for 40,000 animal residents while adhering to health guidelines. In April, we livestreamed a rare spawning event of *Acropora hyacinthus* colonies from our world-leading **Coral Spawning Laboratory**—a scientific breakthrough with on-the-reef conservation implications. Academy scientists partnered with the U.S. Forest Service in California for a multi-year assessment of forest fire risk and resilience at 80 sites covering 8,000 acres, and documented more than 64 species of birds as they return to recovering forests.

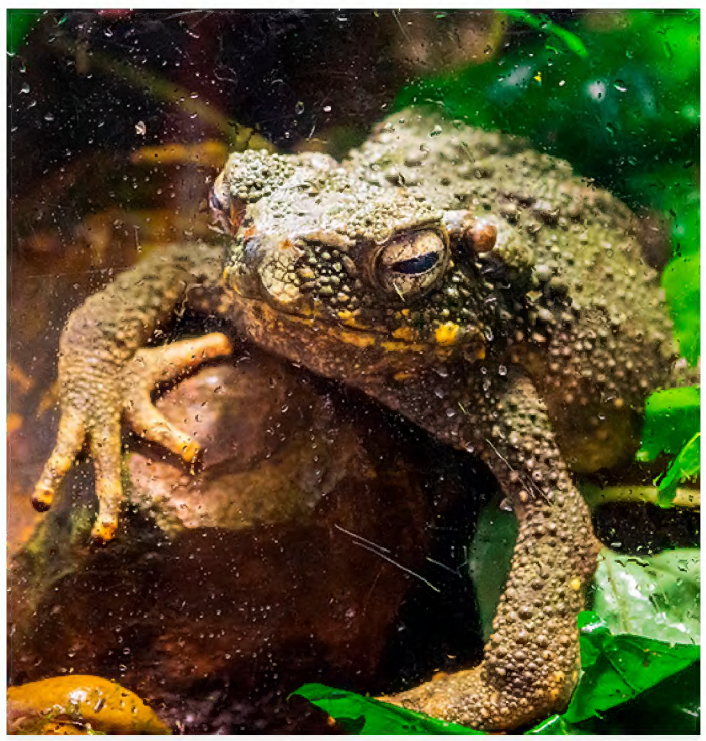
We're at a pivotal point where we can take our vast understanding of nature to help the natural world and humans thrive together. That is the only way forward.

Dr. Shannon Bennett, Chief of Science

Our **iNaturalist** digital platform continues to be wildly popular, fueling the highest-ever participation in **City Nature Challenge**, co-hosted by our **Citizen Science** team. Nearly one million observers participated from some 250 cities—some under lockdown—helping inspire and connect a global community of naturalists while generating valuable scientific data.



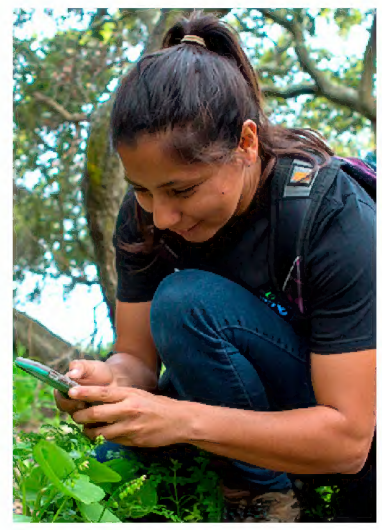
12,800
insect protein-packed lunches provided to Malagasy children



50M
global biodiversity observations on iNaturalist of 300,000+ species by 3M+ observers

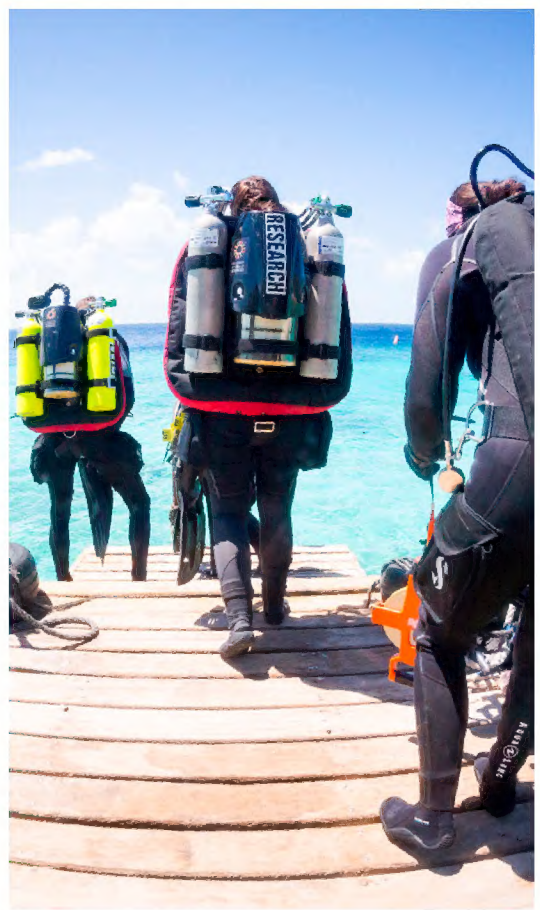
71
new species identified and added to the tree of life

20,000
square meters of Caribbean coral reefs mapped



100%
of global expeditions included community outreach and education

80
juvenile corals growing, with 15 coral colonies spawned in the laboratory (11 for the first time)



26,000+
new research specimens added to collections of 46M

42
scientific publications

Educating and engaging the public

The Academy is committed

to providing high-quality science education and environmental learning experiences and programming to students, families, and educators. Just days after the COVID-19 pandemic forced Bay Area schools and museums to close indefinitely, we launched **Academy @ Home**—a curated, interactive online hub of STEM activities and resources. Within 24 hours, 5,000 educators had viewed one or more resources; by June 30th, our online educational materials and programs had been viewed 6.5 million times—a 68 percent increase in engagement from the previous year.

To keep our community connected during a time of social isolation, we offered new livestreams including the ***Breakfast Club*** series featuring Academy scientists and their discoveries and insights, ***Virtual NightLife***, and ***NightSchool***. Programming from **Morrison Planetarium** and **Steinhart Aquarium**—along with **animal webcams** showcasing our African penguins, shimmering coral reef, and graceful stingrays—helped sustain a public eager for inspiration and hope.

We adapted existing programs to offer a mix of online and in-person activities; leveraged our **distance learning** expertise to support educators and families grappling with the challenges of helping students learn in a virtual environment; and successfully pivoted the **Rock Fund Program** field trip experiences into online programs. Our teacher professional development programs like the **Bayview Science Institute** provided educators with tools—including lesson plans, videos, and strategies—to maintain and support exceptional science-based learning and engagement while teaching remotely. To serve families and youth programs with limited time and budgets, we created a new online version of **Science Action Club**, our national afterschool and summer program that activates the inner scientist in every curious kid.

I feel like I can teach science online now. Before the Professional Development, this idea seemed impossible and overwhelming.

Yvonne, 5th grade teacher, Monroe Elementary

Because systemic barriers continue to impede universal access to science education, environmental learning, and advancement in STEM careers, we continued to advocate for diversity in science leadership, learning, and research. High-impact programs like **Careers in Science** provided one-on-one science mentorships and workforce development for motivated high school interns in San Francisco, while undergraduate, graduate, and postdoctoral candidates excelled through opportunities like the **Summer Systematics Institute** and **EntoPOC**.

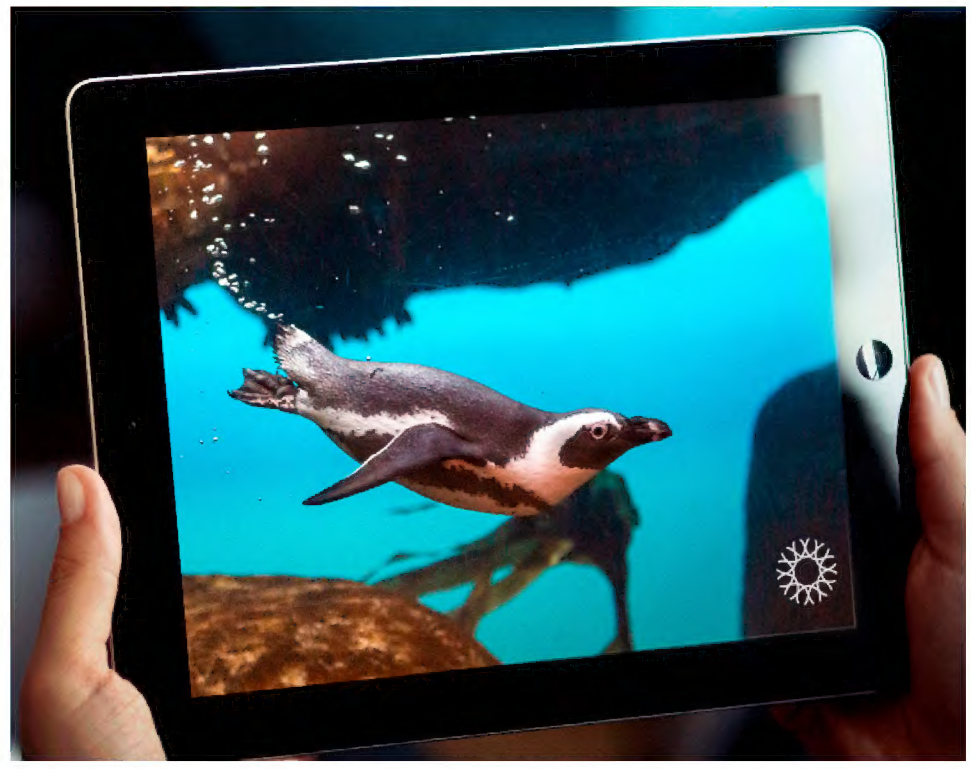
With support from generous donors who understand the lifelong value of high-quality education from an early age, the Academy is pleased and proud to expand access to science and environmental learning through immersive experiences in person and online for millions of children, families, and educators worldwide.

6.5M+
views of online educational materials

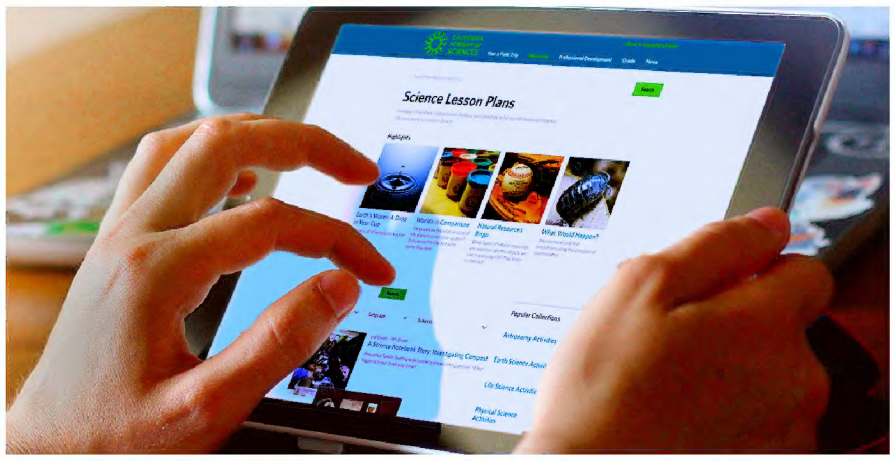
27.9M
global social media engagements

Science Action Club engaged nearly
7,300
youth and 650 activity leaders in 15 states

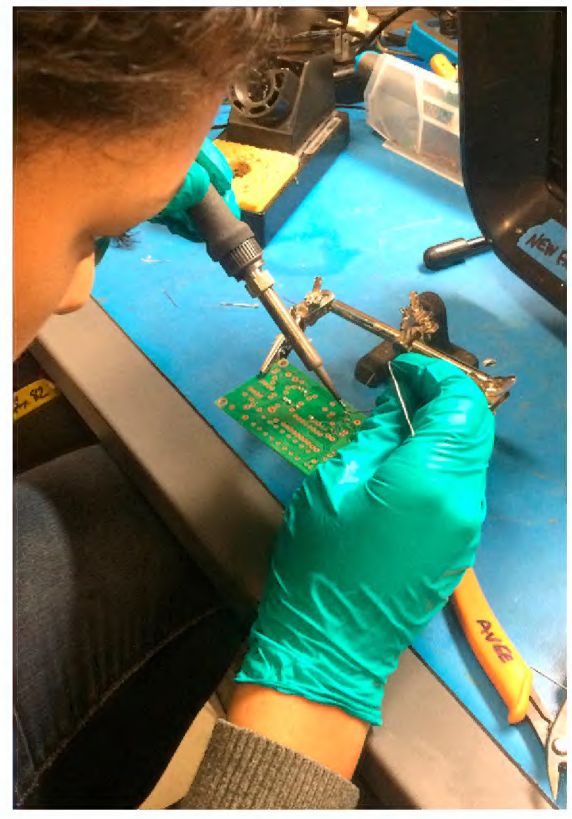
1,243
educators participated in Teacher Professional Development workshops, impacting 135,000+ students in 35 California counties



158
livestream programs delivered from March 13 to June 30, with 530,000+ views



1,308
media stories featuring Academy researchers reached a global viewership of 3.3B across 50 countries in 14 languages



31
Careers in Science youth participants logged 5,766 total internship hours

A community of support

Over nearly 170 years, the Academy has survived multiple moves, major earthquakes, world wars, and global pandemics. We have always emerged stronger with support from generations of visitors, volunteers, members, donors, and dedicated staff. Thank you.

We were guided this year by many champions: the **Academy leadership** team; our Board of Trustees and Board chair, Elizabeth R. Patterson; and the Development Advisory Committee. Thank you to Emeritus Trustee Tom Tusher and Pauline Tusher for supporting science at the Academy, and to Troy and Leslie Daniels for unwavering support as Troy completes his Board tenure.

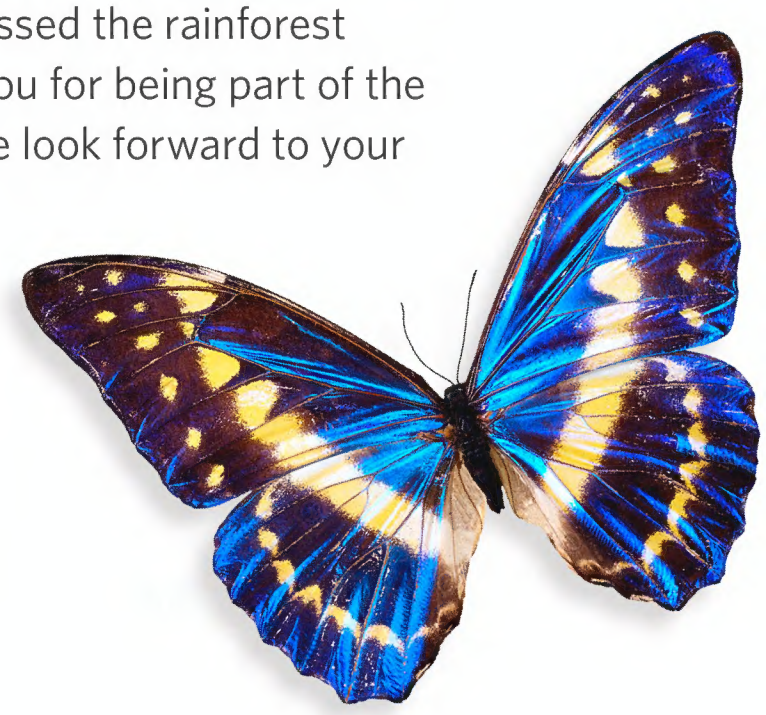
We are grateful for generous philanthropic support through our **Friends Circle**, **Leadership Circle**, **Director's Circle**, **Foundation Partnerships**, **Corporate Engagement**, **Planned Giving**, and the **Academy Resilience Fund**. Thank you to the following individuals and institutions for outstanding gifts: the Barbara and Gerson Bakar Foundation in support of core Academy work and education initiatives; the Hearst Foundations for a major grant to our Bridge Fund Campaign—which inspired additional philanthropy from hundreds of individuals, families, friends, and neighbors; the estate of Dorothy A.C. Brooke, an Academy member and donor since 1977; and Richard Dong, who pledged to establish the *Richard G. and Mae F. Dong Endowment Fund for Education.*

When shelter-in-place orders shuttered the museum just weeks before our annual gala, our Donor Events team swiftly pivoted to host **Big Bang: Live Online**. The Academy's community of supporters and friends rallied to raise more than $1.8M, including $400,000 to fund Nature Connection Programs. Huge thanks to all attendees, especially Co-Chairs Ron Zeff of Carmel Partners and Kendal Friedman and Corporate Chair John C. Adams of Wells Fargo Bank, for supporting Big Bang: Live Online.

We also celebrated the 50th Anniversary of our official **Volunteer Program**—noting that thousands of people have volunteered time, knowledge, and enthusiasm to the Academy since our founding in 1853. With some 750 volunteers outnumbering 600 paid staff, volunteers are vital to our work and the personal connections they provide always receive stellar guest satisfaction ratings. Thank you, volunteers!

We have always emerged stronger with support from generations of visitors, volunteers, members, donors, and dedicated staff.

To everyone who reached out during the museum closure—curious about Claude and the penguins; concerned for staff impacted by pandemic cutbacks; or sharing that a grandchild missed the rainforest butterflies—thank you for being part of the Academy family. We look forward to your next visit!



In your words...

"Huge thank you to the Academy for **encouraging and inspiring** passion, wonder, and positive action. ***-Anna***

I adore the Academy and your **contributions to science and connecting people** to so many important and fascinating topics. Wishing you all well. ***-Victoria***"

"I hope that the organization will weather these difficult times and **continue with the important work** it has historically done. ***-Jayne***

Thank you for **staying connected** with our community during these strange and difficult times! ***-Sara***"

I've **enjoyed this space since I was a wee child**, before the renovation and all. I hope my donation can help even a little! ***-Chi***"

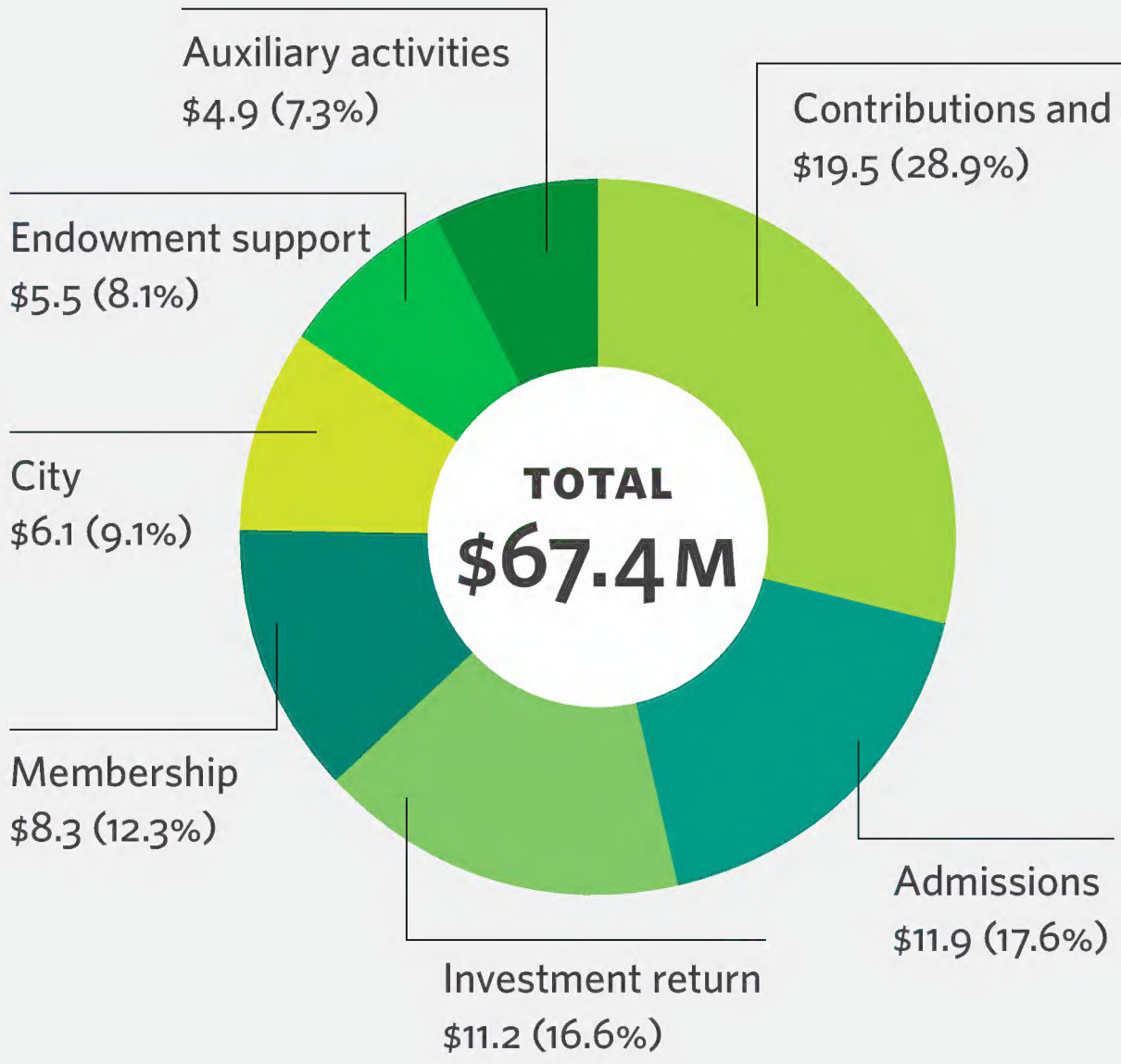
Financials

FY20 REVENUE MIX
$ IN MILLIONS

This is an excerpt from the Statement of Activity.

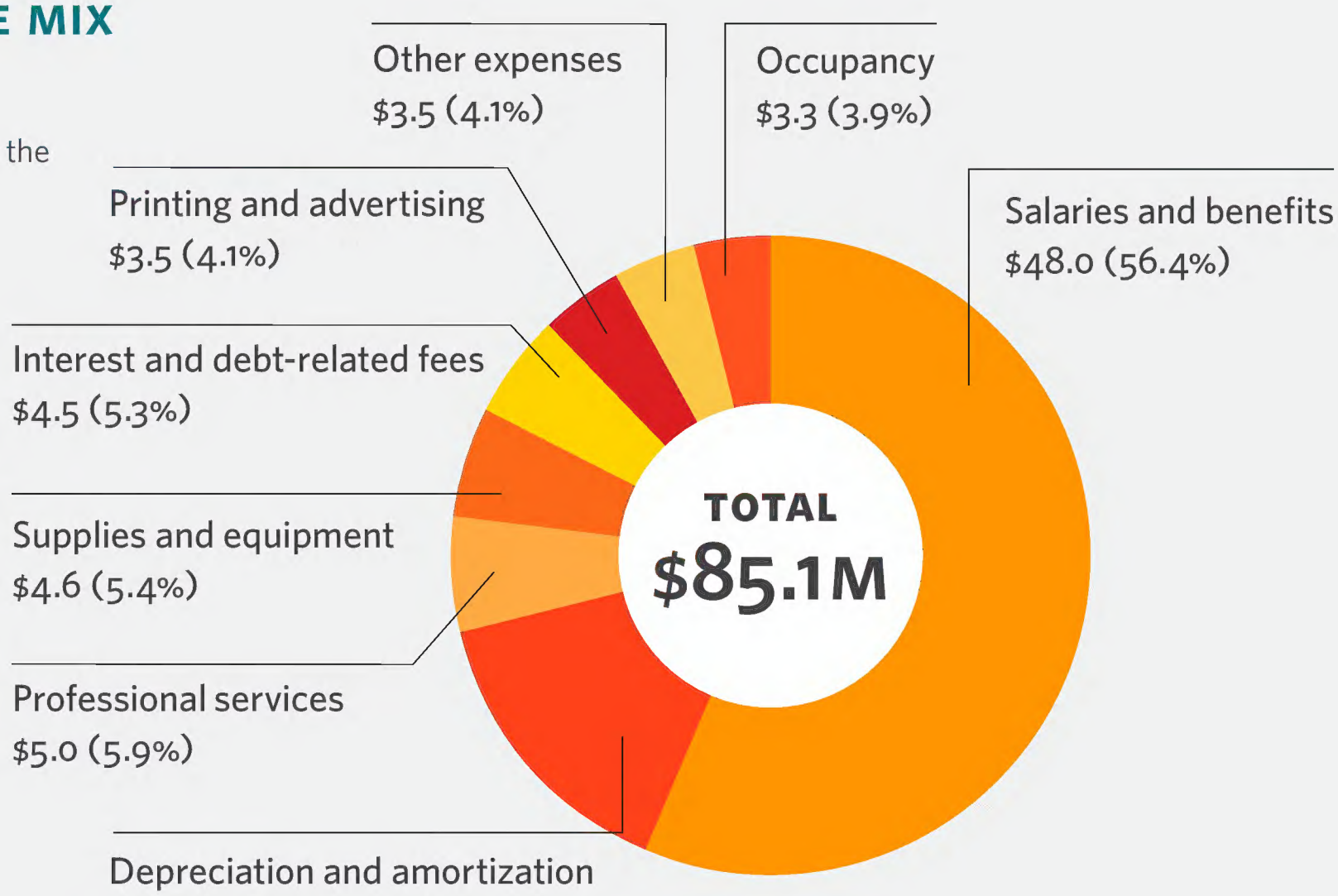
These revenue items include transactions with and without donor restrictions:

» Contributions and grants
» Investment return



FY20 EXPENSE MIX
$ IN MILLIONS

This is an excerpt from the Statement of Activity.



Thank you.

Thank you for joining the Academy to champion world-changing scientific research and global access to science and environmental learning for all. We appreciate all that you do to support our mission to create a healthy, thriving world for people and the planet—for today and always.

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